

Remarks

Claims 1-20 were pending for examination in the prior Office Action, with claims 5-7, 9, 12, 16, and 17 withdrawn from consideration following a prior restriction requirement. Claims 1-20 are canceled without prejudice in this Amendment, and new claims 21-41 are added. Examination and consideration of these new claims is now respectfully requested.

In the Office Action mailed March 15, 2006, the Examiner rejected claims 1-4, 8, 10, 11, 13-15 and 18-20 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-4, 8, 10, 11, 13-15 and 18-20 were also rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0144356 to Kawai et al.

Applicant respectfully submits that all of the new claims 21- 42 are allowable. Of the new claims, claims 21, 25, and 30 and 31 are independent. Each of claims 21, 25, and 30 is directed to a coolant blend for cooling a fuel cell stack, and each of these claims requires that:

the electrical conductivity of the coolant blend is 10 μ S/cm or less at 25°C.

The cited Kawai reference does not teach or suggest a blend in which the electrical conductivity is maintained within this claimed limit. Kawai is not specific as to the electrical conductivity of the hair dye described in the reference, nor does Kawai teach that electrical conductivity is in any way a relevant feature for hair dyes.

To the extent one can infer anything about the electrical conductivity of the hair dyes discussed in Kawai, the reference teaches away from the claimed limitation. For example, Kawai teaches that:

Taking the case where an acid dye is used as the direct dye of the component (A) as an example, the pH of the hair dye composition according to the present invention is *preferably within a range of 2 to 5, more preferably 2 to 4.5, particularly 2.5 to 4* when it is diluted to 1/10 with water from the viewpoints of even hair coloring and inhibition of irritation to the hand and skin. As a pH adjuster, may be used an organic acid, inorganic acid or a salt thereof, with an organic acid or a salt thereof being particularly preferred.

Kawai, at paragraph 32 (emphasis supplied).

Hair dyes of such substantial acidity, which Kawai teaches are preferred for even hair coloring without undue skin irritation, will naturally have electrical conductivities far in excess of the claimed limitation. Kawai thus fails to teach or suggest a colored blend having an electrical conductivity satisfying this element of independent claims 21, 25, or 30. These claims are thus patentable over the cited prior art, as are claims 22-24, and 26-29, each of which depends from independent claim 21.

New independent claim 31 is directed to a fuel stack assembly comprising a fuel cell stack and a fuel cell coolant blend having the same restricted electrical conductivity as the blends of the prior independent claims. As noted above, Kawai fails to teach (and in fact teaches away from) a composition having this restricted conductivity. Kawai, further, does not teach or suggest that his hair dyes should be used as coolants

in fuel cell stack assemblies. New independent claim 31 is thus patentable over the cited art, as are claims 32-41, which depend from it.

For the reasons stated above, Applicant submits that the application is in a condition for allowance. Therefore, Applicant respectfully requests that a timely notice of allowance be issued in this case.

If there are any fees due in connection with this matter, please charge Applicant's Deposit Account No. 01-0265.

Respectfully submitted,

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